

Notes on Cleonymidae (Hym. Chalcidoidea). I

By

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In the year 1958 Bouček published an excellent paper on *Cleonymidae* with a key to the genera (only for *Cleonyminae*). He had unfortunately not seen the types of some of the genera and for that reason he could not place some of the genera satisfactorily. He also discussed the status of the family *Cleonymidae* and thought that would be better to make *Cleonymidae* (not *Chalcedectinae*) a subfamily of the family *Pteromalidae*.

Last year I had the opportunity to study the types of some species in British Museum (Nat. Hist.), London, and Hope Department of Entomology, Oxford, and can now give some new synonyms and combinations. For the permission to study the types I am much grateful to Mr. J. F. Perkins of the British Museum (Nat. Hist.) and Mr. G. J. Kerrich of the Commonwealth Institute. I am also much indebted to Dr. M. W. R. de V. Graham for giving me opportunity to study Westwood's types and for some valuable discussions.

The family *Cleonymidae* consists of two subfamilies: *Cleonyminae* and *Chalcedectinae*. They are not very near related. In the following I am confining myself to *Cleonyminae* and shall postpone *Chalcedectinae* to a forthcoming paper. *Cleonyminae* comprises partly heterogenous genera, some of which belong to different families (see page 109). Bouček (1958) has in his "Cleonyminen-Studie" pointed out that many of the genera in Europe formally placed in *Cleonymidae* must be transferred to other groups and subfamilies in the family *Pteromalidae* (that is the case with the tropical genera too). In my opinion even the *Trigonoderus*-group (see Bouček 1958) should not be placed in the subfamily *Cleonyminae*.

Bouček (1958) has characterized *Cleonyminae* as follows: "Fühler mit nur einem Ringglied (oder ausscheinend keinem, wenn dieses fadengliedrigartig, gross ist) und sieben oder mehr Fadengliedern; Augenränder (von vorn gesehen) auch unten stark divergierend; Pronotum gross; Hintertibien mit zwei Sporen, Schenkel, besonders die vorderen und die hinteren mehr weniger verdickt; Körper oft gross".

This is an excellent characterization. To the above can be added that *Cleonyminae* has notarices complete (in some case not well defined) and prepectus large. Mandibles (left and right) with 3 teeth. In some genera free labrum occurs: *Paraheydenia* Cam., *Solenura* Westw. *Thaumasura* Westw., *Cleonymus* Latr., *Callocleonymus* Masi and *Glyphotoma* Cam.

Cleonyminae seems to be an old group (at least partly), especially the tribe *Heydenini* with one genus *Heydeniopsis* gen. n. from Oligocene (Baltic

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Amber). I think we must search for the ancestors of many groups of *Chalcidoidea* particularly in this group (Heydenini). In a forthcoming paper I hope to give valid reasons for this hypothesis.

Key to the tribes of the subfamily Cleonyminae.

1. Antennae with clava asymmetric 2.
- . Antennae with clava not asymmetric 3.
2. Antennae 11-jointed (11171). Fore femora without tooth ventrally. Antennal sulcus wanting or nearly so. Pronotum normal, aberrant genera (*Notanisus* Walk., *Pannoniella* Erd) with long pronotum *Cleonymini*
- . Antennae 12-jointed (11163) see *Heydenini*
3. Axillae projecting in front of a level with the base of scutellum 4.
- . Axillae not projecting, normal 5.
4. Antennae 10-jointed (11251). Legs narrow and long. Gaster elongate, ovipositor long. Propodeum very reduced in the middle. Eyes very large. Hind tibia with 1 spur *Louricini* trib. n.
- . Antennae 13-jointed (11173). Fore femora swollen, ventrally with large, black setae. Ovipositor long or short. Thorax compressed dorsally. Inner orbites produced, with transverse keels *Ooderini*
5. Antennae 13-jointed (1 12-jointed genus from Baltic Amber) 6.
- . Antennae 11- or 12-jointed 7.
6. Pronotum longer than wide. Antennae 13-jointed (11173) or 12-jointed (11163). Gaster not sclerotized *Heydenini* trib. n.
7. Petiole long, cylindric. Gaster long and laterally compressed. Legs long and slender 8.
- . Petiole very short. Gaster not laterally compressed. Legs stout, femora swollen, seldom slender and not especially long 9.
8. Petiole with transverse striation and long hairs. Ovipositor long. Prepectus very large. Inner orbites produced, with transverse keels *Leptofoenini*
9. Gaster sclerotized and with a longitudinal carina dorso-laterally. Fore femora swollen, with a tooth more or less distinct distally on the ventral side. Antennae 11-jointed (11171) *Lyciscini*
- . Gaster more or less tubular and less sclerotized, no longitudinal carina dorso-laterally. Legs slender but fore femora swollen in some genera. Antennae 11-jointed (11171), in aberrant genus 12-jointed (11172) *Thaumasurini*

Cleonymini

To this tribe belong the following genera: *Cleonymus* Latr., *Callocleonymus* Masi., *Glyphotoma* Cam., *Ptinobius* Ashm., *Notanisus* Walk. and *Pannoniella* Erd. According to the description *Aplatygerrhus* Girlt. seems to belong to this tribe.

Cleonymus Latr. 1809

Latreille, Gen. Crust. Ins., 4, p. 29, 1809

Type: *Diplolepis depressa* Fabr.

C. *bekiliensis* (Risbec), Mém. l'Inst. Sci. Madagascar., II, pp. 391— Madagascar
393, 1952 *Comb. n.*
Cheiropachys bekiliensis Risb.

C. *depressa* (Fabricius), Suppl. Ent. Syst., p. 231, 1810 Europa
Ichneumon depressa Fabr.

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C. obscurus Walker, Ent. M. Mag., 4, p. 352, 1837 Europa
C. californicus Girault, Journ. Ent. and Zool., 9, p. 11, 1917 Californien
C. nigriclavatus Girault, Descr. Hym. Chalcidoid. Variorum cum Observ., Florida
 III, p. 6, 1917
C. collaris Spinola, Mém. accad. Sc. Torino (2), XIII, p. 46, 1853 Brazil
C. albomaculatus Heqvist, South African Animal Life., VII., pp. 415—416, 1960 Cape Prov.
C. submersus Brues, Bull. Mus. Comp. Zool. Havard Coll., 54, p. 27, f. 47, 1910

This species from Florissant, Colorado, preserved in the Miocene shales and described by Brues as belonging to *Cleonymus* seems to me not to be a true *Cleonymus*. According to description and figure *C. submersus* has an other shape of head than recent species of *Cleonymus*. The wing veins in fore wing are different. There is doubt if *C. submersus* belongs to *Cleonyminae*. In any case this species must be transferred to an other genus, probably a new one. As a new genus for this species I propose *Bruesisca*.

Bruesisca gen. n.

Type: *Cleonymus submersus* Brues

B. submersus (Brues), Bull. Mus. Comp. Zool. Havard Coll., 54, p. 27, f. 47, 1910
Comb. n.

Ptinobius Asm. 1896

Ashmead, Proc. Ent. Soc. Wash., 4, p. 11, 1896

Type: *Charitopus magnificus* Ashm.

P. agrili Rohwer, Proc. Ent. Soc. Wash., 21, p. 5, 1919 California
P. californicus Crawford, Insec. Insc. Menstr., 4, p. 142, 1917 (1916) "
P. magnificus (Ashmead), Kans. Agr. Expt. Sta. Bul. 3: app., IV, 1888 U.S.A.
Charitopus magnificus Ashm. (N. J., W. Va., Va. Kans., Tex.)
 Syn: *Ptinobius dysphagae* Girault, Ent. News., 26, p. 130, 1915
P. texanus Crawford, Insec. Insc. Menstr., 4, p. 142, 1917 (1916) Texas

Callocleonymus Masi 1939

Masi, Boll. Lab. Ent. Portici., III, pp. 289—290, 1939

Type: *C. pulcher* Masi

C. ferrierei Kerrich, Eos., XXXXIII, pp. 270—272, 1957 China ?
C. pulcher Masi, Boll. Lab. Ent. Portici., III, pp. 291—294, 1939 Somali

Notanisus Walk. 1837

Walker, Ent. Mag., 4, p. 352, 1837

Type: *N. versicolor* Walk.

N. versicolor Walker, ibid.

Pannoniella Erd. 1960

Erdős, Acta Zoologica Acad. Sci. Hung., VI, p. 306, 1960

Pannonica Erdős, Ann. hist.-nat. Mus. Hung., 39, pp. 131—133, 1946 (praeocc.)

Type: *P. sexramosa* Erd.

P. sexramosa (Erdős), ibid., p. 132, 1946 Hungary
Pannonica sexramosa Erd. ČSR

Glyphotoma Cam. 1912

Cameron, Societas entomologica, XXVII, pp. 63—64, 1912

Type: *G. albitarsis* Cam.

In British Museum (Nat. Mus.) 2 species were marked as types but apparently not described by Cameron: *Glyphotoma testaceicornis* and *G. pilosa*. Both were males. They fitted very well with Masi's *Paracleonymus*. Obviously *Glyphotoma* is congeneric with *Paracleonymus* and since *Glyphotoma* is older than *Paracleonymus* the latter must be a synonym of *Glyphotoma*.

Glyphotoma Cam. (see above)Syn: *Paracleonymus* Masi, Konowia., V, pp. 340—343, 1926

G. angustatus (Masi), Konowia., V, pp. 340—343, 1926 Comb. n. Formosa
Paracleonymus angustatus Masi.

G. albitarsis Cameron, Soc. entom., XXVII, p. 64, 1912 Borneo

Aplatygerrhus Giralt. 1913

Girault, Trans. R. Soc. S. Austral., 37, p. 77, 1913

Type: *A. magnificus* Giralt.

A. magnificus Girault, Trans. R. Soc. S. Austral., 37, p. 77, 1913 Tasmania

A. dentatifemur Girault, Insec. Insc. Menstr., 14, p. 60, 1926

A. imperialis Dodd, Trans. R. Soc. S. Australia., 48, p. 163, 1924

A. regalis Dodd, ibid., p. 164 Norfolk Isl.

Lord Howe Isl.

Heydenini trib. n.

To this tribe belongs following genera: *Heydenia* Först., *Paraheydenia* Cam. and a new genus from Baltic Amber *Heydeniopsis* gen. n.

Heydenia Först. 1856

Förster, Hym. Stud., 2, pp. 46, 48, 1856

Type: *H. pretiosa* Först.

H. pretiosa Förster, Hym. Stud., 2, pp. 48—49, 1856 Europa

Syn: *Lycisca silvestri* Russo, Boll. Lab. Ent. Agr. Portici 2, pp. 195—205, 1939

Heydenia excellens Wachtl, Wien. Ent. Ztg., 8, pp. 89—91, 1889

H. natalensis (Westwood), Thesaurus Ent. Oxon., p. 149, t. 27 f. 6, Natal 1876

Lycisca natalensis Westw.

H. seyrigi (Risbec), Mém. l'Inst. Sci. Madagascar., II, pp. 387—390, Madagascar 1952

Lycisca seyringi Risb.

H. unica Cook & Davis, Mich. Agr. Expt. Sta. Bul., 73, p. 15, 1891 U.S.A.

(Mont., Mich., Va., W. Va., N.C.)

Heydeniopsis gen. n.

Head subglobular. Antennae (fig. 2 B) inserted near the base of clypeus and with 12 joints (11163). Clava has an appendage as in the genus *Cleonymus* (fig. 2 B). Eyes large, hairy. Malar space as long as half breath of eye. Ocelli in an equilateral triangel. Prothorax long and of the same shape as in *Heydenia* and *Paraheydenia*. Propodeum long with a median carina and complete plica lateralis. Notaulices complete. Spiracles on long distance from anterior margin. Gaster petiolated. Ovipositor protruding. Fore femora swollen as in *Heydenia*. Hind tibia with two spurs.

Type: *H. cleonymoides* sp.n.

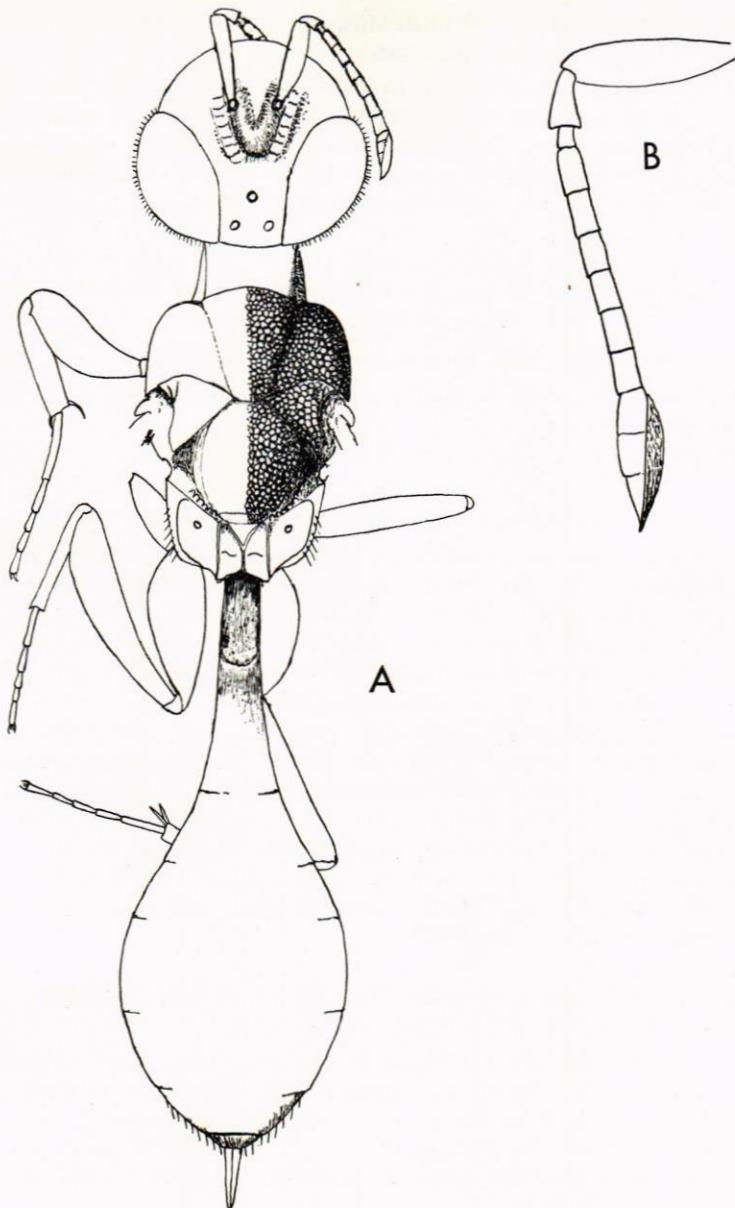


Fig. 2. A. *Heydeniopsis cleonymoides* sp.n. B. The antennae of *H. cleonymoides* sp.n.

H. cleonymoides sp.n.

♀ Thorax metallic green—dark blue with tint of bronzy, axillae blue. Head, antennae, legs and gaster reddish brown. Femora dark brown outside.

About morphological characters see above and fig. 2 A.

Length: 3.0 mm.

Holotype in the collection of Swedish Museum of Natural History. Well preserved in Baltic Amber with only the wings lost.

This species seems to be a link between *Heydenia* Först and *Cleonymus* Latr. *Heydeniopsis* is the first true *Cleonymidae* known from Baltic amber. *Cleonymus submersus* Brues (see p. 93) is a questionable member. From this new genus we can draw the conclusion that the genera *Heydenia* and *Paraheydenia* belong to an old group and are relicts only of a larger group.

Paraheydenia Cam. 1911 nec Girlt. 1915

Cameron, Proc. Linn. Soc. New South Wales., 36, pp. 653—654, 1911

Type: *P. longicollis* Cam.

<i>P. cristatipennis</i> Girault, Insec. Insc. Menstr., 12, p. 3, 1924	Queensland
<i>P. longicollis</i> Cameron, Proc. Linn. Soc. New South Wales., 36, pp. 654—655, 1911	N.S. Wales
<i>P. madagascariensis</i> Heqv. sp.n. (see below)	Madagascar

Paraheydenia madagascariensis sp.n.

♂. Green with bronze and scarlet tints. Legs, scape, pedicel (the rest of antennae brooken) and base of petiole yellowish brown, tarsus yellowish white. Face and anterior part of mesopleura with white scalelike hairs. Fore wings with pale yellowish brown veins and 2 tufts of black setae, one at the base of parastigma and the other one at the base of the marginal vein. Below the parastigma a very pale infuscation and round and below the stigmal vein an infuscated spot.

Head (fig. 1 C) large about 2 times wider than long. Antennae inserted just above a level of ventral edge of eyes. Malar space nearly as long as the breadth of eye. Pronotum much longer than wide. Notaulices complete but partly illdefined. Pro-podeum (fig. 1 A) long with median carina and complete plica lateralis. Fimbriae few and scattered. Spiracles small, circular. Petiole long, half the length of gaster. Hind tibia with two spurs. Fore femora swollen. Fore wing (fig. 1 B) with basal part bare, marginal vein much longer (2 times) than postmarginal vein, the latter somewhat longer than the stigmal vein.

Length: 1.9 mm.

Holotype in the collection of British Museum (Nat. Hist.). London
Madagascar, Périnet, 17.XI, 1952, leg. K. E. Schedl.

This new species is the first representative of *Paraheydenia* Cam. outside Australia. It is very similar to *Paraheydenia longicollis* Cam., but differs in having two tufts on the fore wing, one at the base of parastigma and the other one at base of marginal vein. Fore femora without truncate teeth ventrally and with pronotum reticulated. In some respect this species is similar to *Heydeniopsis cleonymoides* sp.n. (see the description pp. 94—95).

Ooderini Bouč. 1958

Bouček 1958 formed for *Oodera* Westw. a new tribe. He discussed the status of *Oodera* and pointed out the peculiar form of thorax. I have had the opportunity to examine some of the types in British Museum (Nat. Hist.) and the types of Westwood in Hope Department of Entomology at Oxford. In the following I have tried to list all species belonging to this genus.

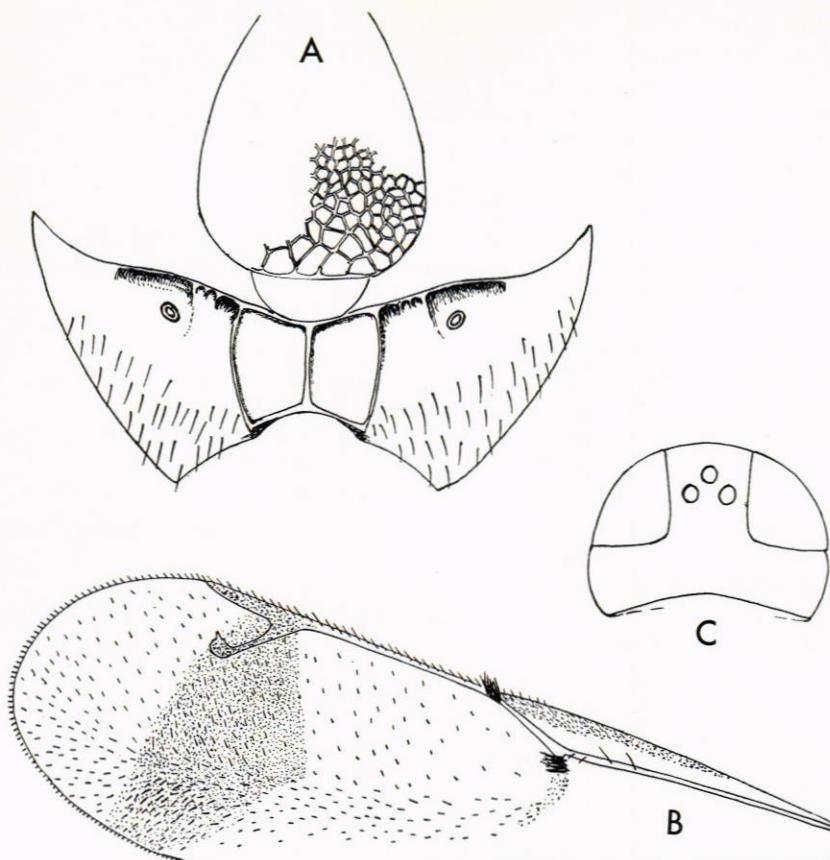


Fig. 1. *Paraheydenia madagascariensis* sp.n. A. Propodeum and scutellum. B. Fore wing. C. Head in dorsal view.

Oodera Westw. 1874

Westwood, Thesaur. Ent. Oxon., p. 145, 1874

Syn: *Stellophora* Risbec, Mém. Inst. Fr. Afr. Noire, 13, p. 239, 1951

Type: *O. gracilis* Westw.

O. dakarensis Risbec, Bull. l'I.F.A.N. XIX, pp. 256—260, 1957 France West Africa
O. formosa Giraud, Verh. Zool.-bot. Ges. Wien, 13, p. 21, 1863 South Europe
 Syn: *O. bestia* Nikolskaja, Chalcid Fauna SSSR., p. 474, 1952
O. gracilis Westwood, Thesaur. Ent. Oxon., p. 145, 1874 Aru
O. longicollis Cameron, Roy. Asiatic Soc. No. 39, p. 97, 1903 Borneo
Epistenia longicollis Cam., J. Strait. Asiatic Soc. 1903
O. madagassa Bouček, Acta. Ent. Mus. Nat. Prag. XXII, pp. 376—379, 1958 Madagascar
O. magnifica (Risbec), Mém. Inst. F. Afr. Noire. 13, pp. 239—243, 1951 Senegal
Stellophora magnifica Riss.
O. monstrum Nikolskaja, Chalcid Fauna SSSR., p. 474, 1952 South part of SSSR

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<i>O. ornata</i> Gahan, Philipp. J. Sci., 27, p. 97, 1925	Philippines
<i>O. obscura</i> Westwood, Thesaur. Ent. Oxon. p. 146, 1874	?
<i>O. rufimana</i> Westwood, ibid., p. 146, 1874	Cambodia (Mouhot)
<i>O. tenuicollis</i> (Walker), Notes on Chalcid. Pt. 5, p. 86, 1872	<i>Comb. n.</i> Mysol
<i>Eupelmus tenuicollis</i> Walker, ibid.	

Lyciscini Bouč. 1958

To this tribus belongs following genera: *Lycisca* Spin., *Urolycisca* Rom., *Epistenia* Westw., *Neolycisca* Heqv., *Romanisca* Heqv., *Paralycisca* Heqv., *Amazonisca* Heqv., and *Solenura* Westw.

Solenura Westw. 1868

Westwood, Trans Ent. Soc. London., p. 36, 1868

Syn: *Ormyrodes* Brues, Bull. Wisc. Nat. Hist. Soc., 5, p. 46, 1907

Thecasoma Matsumura, Thousand Insects of Japan. Suppl. IV, p. 159, 1918

Taoga Cameron, Entomologist., 42, pp. 210—211, 1909. *syn. n.*

Type: *S. telescopica* Westw.

S. ania (Walker), List Hym. Brit. Mus. Chalcid., I, p. 93, 1846. Malaya (Penang) *Comb. n.*

Epistenia ania Walk.

S. feretrius (Walker), ibid., I, p. 93, 1846. *Comb. n.* Philippines *Epistenia feretrius* Walk.

S. fusco-aenea Masi, Boll. Soc. ent. ital., p. 68, 1943 Somali

S. nigra (Walker), Notes on Chalcid., Pt. 6, p. 87, 1872. *Comb. n.* Zululand *Epistenia nigra* Walk.

S. rufipes (Cameron), Entomologist., 42, p. 211, 1909. *Comb. n.* Borneo *Taoga rufipes* Cam.

S. telescopica Westwood, Trans. Ent. Soc. London., p. 36, Java, Formosa, Japan 1868

Syn: *Thecasoma longicauda* Matsm., Thousand Insects of Japan. Suppl. IV, p. 159, 1918

In the type-collection in British Museum (Nat. Hist.) there is an other species of Cameron, *Taoga carinata*=*Solenura carinata* *Comb. n.*, which seems to be only a manuscript name.

Amazonisca Heqv. 1958

Heqvist, Ent. Tidskr., 79, p. 196, 1958

Type: *A. batesi* Heqv.

A. batesi Heqvist, ibid., p. 198, 1958 Brazil

Paralycisca Heqv. 1958

Heqvist, Ent. Tidskr., 79, p. 192, 1958

Type: *P. cristata* Heqv.

P. cristata Heqvist, ibid., pp. 192—193, 1958 Brazil

Romanisca Heqv. 1958

Heqvist, Ent. Tidskr., 79, p. 194, 1958

Type: *annulicornis* Heqv.

R. annulicornis Heqvist, ibid., p. 194, 1958 Brazil

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Neolycisca Heqv. 1958

Heqvist, Ent. Tidskr., 79, pp. 198—199, 1958

Type: *N. maculata* Heqv.*N. maculata* Heqvist, ibid., pp. 199—200, 1958

Brazil

Epistenia Westw. 1832

Westwood, in Griffith, Anim. Kingd. Ins., 2, p. 432, 1832

Syn: *Dasyglenes* Ashmead, Canad. Ent., 20, p. 174, 1888*Idiobia* Brèthes, Ent. Mitt., 16, p. 330, 1927Type: *E. coeruleata* Westw.

Several species are described as belonging to this genus but many of them belong to other genera. In the following only a preliminary list of the species is given.

E. americana Girault,¹ Arch. Naturges., 78, A 9, pp. 172—173, 1912 Paraguay
E. basalis Walker, Trans. Ent. Soc. London., I, p. 192, 1862 Brazil
E. bella Strand, Arch. Naturges., I, p. 153, 1911 Peru
E. chilensis Brèthes, Revist. chilena., XX, pp. 27—28, 1916 Peru (Aconeagua)
E. coeruleata Westwood, in Griffith, Anim. Kingd. Ins., 2, p. 432, U.S.A. (Georgia)
 1832
E. conica Brèthes,¹ Anal. Mus. Nac. Bs. As., XII, Paraguay (San Bernandino)
 p. 226, 1909
E. cupreoviridis Brèthes, An. Mus. Buenos-Aires., IX, Paraguay (Asunción)
 pp. 11—12, 1906
E. gemmata Girault,¹ Arch. Naturges., 78, A 9, pp. 173—174, 1912 Paraguay
E. goethei Girault, Arch. Naturges. Abt. A, p. 56, 1913 "
E. imperialis Smith, Journ. Proc. Linn. Soc. London Zool., 2, p. 127, 1857 Borneo
E. liquensis Brèthes, Rev. chil. XX, p. 28, 1916 Peru (Asunción)
E. maculipennis (Philippi), Stett. Ent. Zeit., 32, p. 289, 1871 Chile (Valdivia)
Proglochin maculipennis Philippi
E. miripes Girault, Insec. Insc. Menstr., X, pp. 41—42, 1922 Queensland
E. nigriaenea Girault, Mem. Queensl. Mus., IV, pp. 215—216, 1915 "
E. odyneri Ashmead, Psyche., 7, p. 336, 1896 U.S.A. (Californien)
E. quadriplagiata Walker, Notes on Chalcid., Pt. 5, p. 85, 1872 Brazil
E. osmiae (Ashmead), Canad. Ent., 20, p. 174, 1888 U.S.A. (N.J., ?Fla.)
Dasyglenes osmiae Ashm.
E. politus (Say), Contr. Maclur. Lyc. Phila., I, p. 79, 1928 U.S.A. (Va.)
Spalangius politus Say
E. regalis Cockerell, Psyche., 39, p. 228, 1934 U.S.A. (Colo.)
E. schmidti (Brèthes), Ent. Mitt., 16, pp. 330—331, 1927 Costa Rica (San José)
Idiobia schmidti Brèth.
E. scutata Walker, Trans. Ent. Soc. London., 1, p. 392, 1862 Brazil
E. scutellata Brèthes,¹ Anal. Mus. Nac. Bs. As., XII, Paraguay (San Bernandino)
 pp. 226—227, 1909
E. spesiosissima Girault, Rec. S. Austr. Mus., III, p. 313, Queensland (Kuranda)
 1927
E. westwoodi (Guérin), Icon. Règne. Anim., 7, ins. p. 416, 1845 Colombia
Lycisca westwoodi Guér.

¹ It is possible that *E. americana* Girault. is synonymous to *E. scutellata* Brèthes and *E. gemmata* Girault to *E. conica* Brèthes.

Species described as *Epistenia* Westw. but not belonging to this genus.

- E. ania* Walk.=*Solenura* Westw.
- E. aequalis* Walk.=*Chryseida* Spin.
- E. balteata* Cam.=*Urolycisca* Rom.
- E. feretrius* Walk.=*Solenura* Westw.
- E. longicollis* Cam.=*Oodera* Westw.
- E. maculipes* Cam.=*Lycisca* Spin.
- E. nigra* Walk.=*Solenura* Westw.

Urolycisca Rom. 1920

Roman, Ark. Zool., 12, pp. 19—20, 1920

Type: *U. apicalis* Walk.

- U. apicalis* (Walker), Trans. Ent. Soc. Lond., I, p. 393, 1862 Brazil
Lycisca apicalis Walk.
- U. hastata* (Walker), ibid., p. 393 Brazil
Lycisca hastata Walk.
- U. balteata* (Cameron), Biol. Centr. Amer. Hym., I, p. 392, 1884 Guatemala
Epistenia balteata Cam.

Lycisca Spin. 1840

Spinola, Mag. Zool., 2:e sér. 2, pp. 14—18, 1840

Type: *L. raptoria* Spin.

About synonyms see Heqvist (1958)

- L. amazonica* Roman, Ark. Zool., 12, pp. 17—18, 1920 Brazil, Colombia, Peru
- L. cyaniceps* Roman, ibid., p. 19, 1920 Brazil
- L. decora* Strand, Societas Ent., nr. 7, p. 26, 1911 Panama
- L. ignicaudata* Westwood, Thesaur. Ent. Oxon., p. 148, 1874 Brazil, Peru, Colombia Bolivia
- L. maculipes* (Cameron), Biol. Centr. Amer. Hym., I, p. 130, 1884 Brazil, Panama, Colombia
Epistenia maculipes Cam.
- L. nebulipennis* Strand, Societas Ent., nr 7, pp. 25—26, 1911 Bolivia, Peru, Brazil
- L. ogloblina* sp.n. Argentina
- L. romandi* Westwood, Mag. Zool., II, p. 84, 1841 Brazil
- L. raptoria* Spinola, Mag. Zool., 10, p. 18, 1840 Cayenne

Species described as *Lycisca* Westw. but not belonging to this genus.
L. apicalis Walker= *Urolycisca* Rom.

- L. burgeoni* Risbec=gen. n. in tribe *Thaumasurini*
- L. maculipennis* Philippi (see Westwood 1874)= *Epistenia* Westw.
- L. natalensis* Westw.= *Heydenia* Först.
- L. seyrigi* Risb.= *Heydenia* Först.
- L. silvestrii* Russo= *Heydenia* Först.
- L. westwoodi* Guérin= *Epistenia* Westw.

Lycisca ogloblina sp.n.

♀. Blue-black with face green, tint of bronzy and red on vertex and occiput (even some tint of green). Mouthpart and the base of antennae reddish brown. Antennae black. Pronotum with anterior part and posterior part green, laterally blue. A spot in front of each axilla and a narrow band of posterior margin of scapulae green. Post-

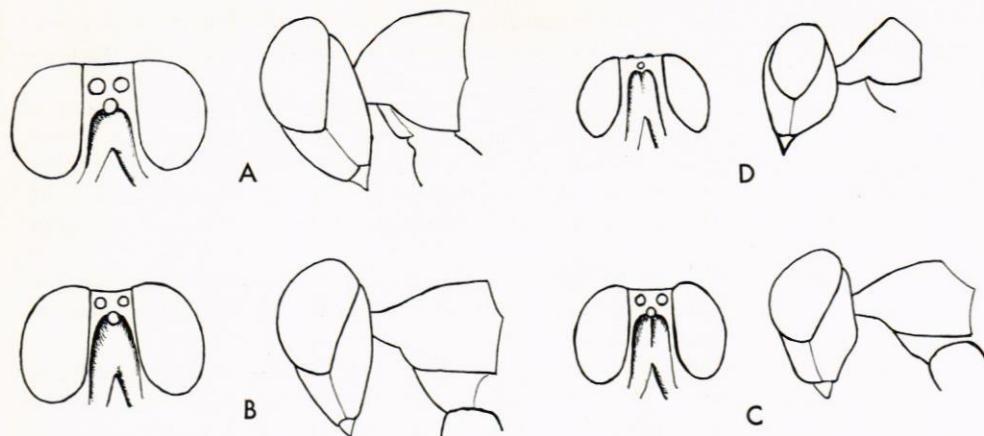


Fig. 3. Head, from in front and laterally. A. *Lycisca amazonica* Rom. B. *L. cyaniceps* Rom. C. *L. nebulipennis* Strand. D. *L. ogloblina* spn.

scutellum violet-blue and propodeum green with tint of blue. Pleurae with mixture of red, blue and green. 2nd, 3rd and 4th segments of gaster with a spot of green. The rest of gaster with tint of violet, red and green. Fore and mid legs reddish brown with yellow trochanters. Hinds legs with coxae black with blue and red tints, trochanteres and knee yellow, femora, tibia and tarsus reddish brown. All claw joints darker (brown). Wing weins reddish brown, a brown infuscation from parastigma to stigmal vein.

Head (fig. 3 D) semiglobular. Malar space more than half length of eye. Antennae (11171) inserted below a level of ventral edge of eyes. Pedicel as long as 1st funicle joint. Fore femora very swollen. 4th segment of gaster as long as 2nd and 3rd segments together and nearly as long as 5th. Postmarginal vein longer than marginal vein. Speculum small, narrow.

♂. Similar to female but the green spots on thorax larger. Scutellum with a blue spot and the 4th segment of gaster with a blue spot on each sides. The red tint on thorax, vertex and occiput more distinct.

Length: ♀. 5.0—7.5 mm; ♂. 6.0 mm

Holotype, Allotype and 2 Paratypes (♀♀).

Locality: Argentina, Loreto. Exp. St. leg. A. Ogloblin

L. ogloblina sp.n. is similar to *L. decora* Strand but differs in the colour and is not swollen behind eyes. The length of the gaster segments is also different.

Because the segments of gaster are so sclerotized in *Lycisca* the variation seems to be very small in the length of segments. For that reason I have modified my key (see Heqvist 1958) and used this character in the following key.

Key to the species of *Lycisca* Spin. (*L. raptoria* Spin. not included)

♀♀

1. Large species (9—21 mm). Abdomen (fig. 4 D) much longer than thorax + head 2
- . Small species (5.0—12 mm). Gaster as long as or somewhat longer than thorax + head 4

2. Valvula ventralis from posterior margin of 3rd segment. The length from posterior margin of 5th segment to apex 2 times the length of the 4th segment. Abdomen long narrow.

Black, blue spots on orbites, anterior part of pronotum and posterior laterally, posterior part and lengthwise of notaulices, callus, occiput, laterally of gaster, posterior margin of the scutum, pleurites and coxae with a mixture of blue, green and purpure. Basal part of scape blue, posterior part of gaster blue with tint of red. Legs (without coxae) fuscous-reddish brown. Length 18—21 mm.

L. romandi Westw.

—. Valvula ventralis from the middel of 4th segment. The length from posterior margin of 5th segment to apex shorter than 2 times the 4th segment. Abdomen more stout 3

3. 5th segment at least 1.5 longer than 4th. The length from posterior margin of 5th segment to apex 1.5 times the length of the 4th segment. Hind coxae as long as 1st—3rd segment combined. From half 5th segment to apex golden red.

Black, with a blue-green band anterior and posterior of the pronotum, posterior of the mesonotum and on callus. Legs reddish brown. Pleurites and coxae blue, green and red mixed. Length 12—20 mm. *L. ignicaudata* Westw.

—. 5th segment $1\frac{1}{3}$ longer than 4th. The length from posterior margin of 5th segment to apex as long as the length of 4th segment. Hind coxae not so long as 1st—3rd segments combined. From posterior part of 5th segment to apex golden red.

Black, face partly, occiput, a broad band anterior and posterior of pronotum, posterior of mesonotum, callus, 1st—4th segments of the gaster laterally green-blue. Legs reddish brown, hind legs fuscous, coxae green, blue and red, apically mixed white-yellow. Length 9—15 mm. *L. maculipes* Cam.

4. Gaster longer than thorax+head ($1\frac{1}{2}$ times).

Head swollen behind eyes with equal puncturation on head, pronotum, mesopraescutum and scutellum. Scapulae with more coarse punctures. Head green-blue with a black spot all round ocelli. Pronotum green, with two black spots posteriorly. Mesonutum black with a green band posterior. Scutellum black with a green spot in the middel and at apex. Propodeum green. Abdomen black with tint of scarlet on second and third segments, with a green band on 4th segment and a golden green spot laterally, 5th segment with a golden green spot laterally. Fore- and middel legs pale reddish brown with coxae and femurs ventrally yellow, hind legs pale reddish brown with coxae violet-blue at apex yellow and tibia reddish brown, tarsus reddish brown with penultimate and ultimate joints darker. Length 12 mm. *L. decora* Strand

—. Gaster as long as thorax+head 5

5. The length from posterior margin of 5th segment to apex as the length of the 4th segment or shorter 6

—. The length from posterior margin of 5th segment to apex $\frac{1}{5}$ times longer than 4th segment 8

6. The length from posterior margin of the 5th segment shorter than 4th segment.

Blue-black with face green, tint of bronzy and red on vertex and occiput (even some tint of green). Mouthpart and the base of antennae reddish brown. Antennae black. Pronotum with anterior- and posterior part green, laterally blue. A spot in front of axillae and a narrow band of posterior margin of scapulae green. Postscutellum violet-blue and propodeum green with tint of blue. Pleurae

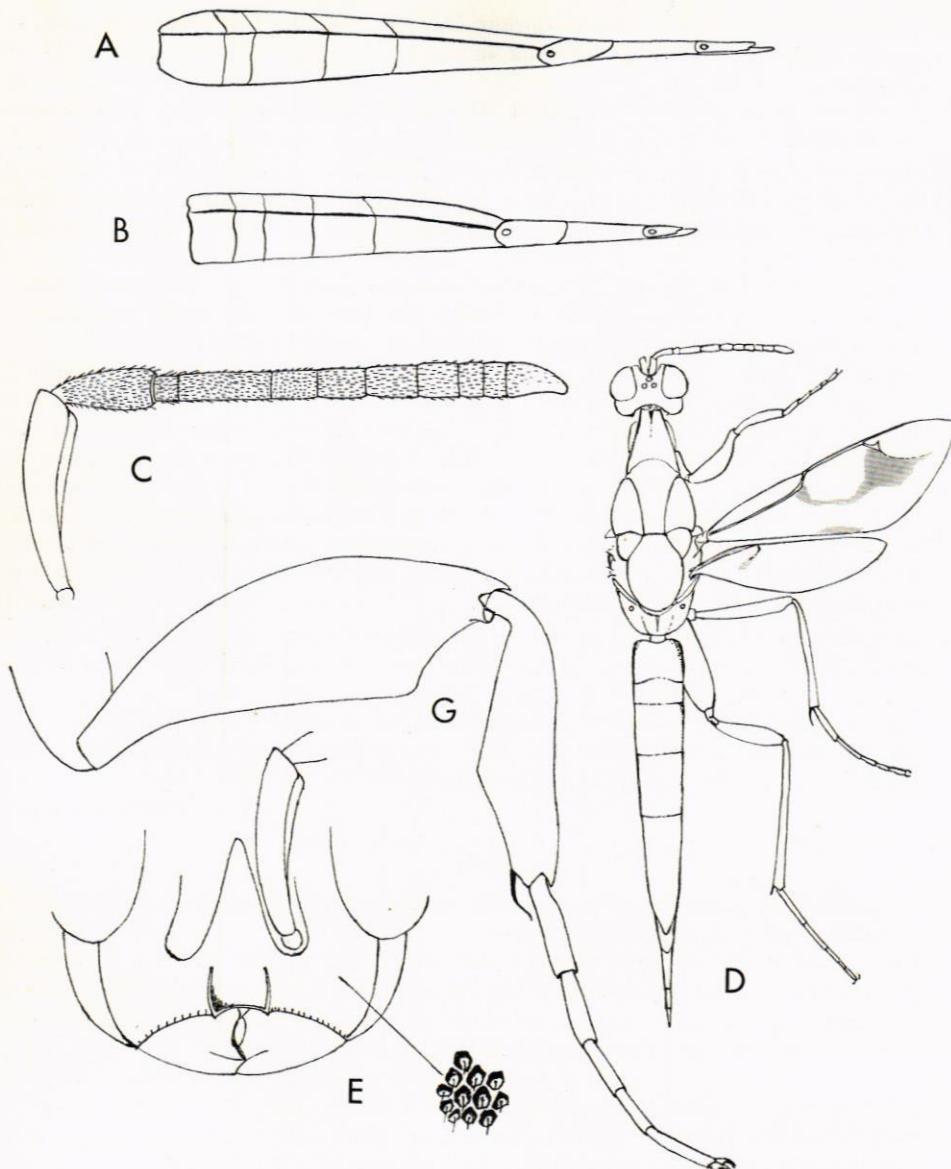


Fig. 4. A. Gaster (in dorso-laterally view) of *Lycisca romandi* Westw. B. Gaster (in dorso-laterally view) of *L. ignicaudata* Westw. D. *L. romandi* Westw., female. C. Antenna of *L. romandi* Westw. E. Head, from in front (partly) of *L. romandi* Westw., G. Fore leg of *L. romandi* Westw.

with mixture of red, blue and green. 2nd, 3rd and 4th segments of gaster with a spot of green. The rest of gaster with tint of violet, red and green. Fore and mid legs reddish brown with trochanters yellow. Hind legs with coxae black with blue and red tints, trochanteres and knee yellow, femora, tibia and tarsus

reddish brown. All claw joints darker (brown). Wing veins reddish brown, a brown infuscation from parastigma in an arch to stigmal vein. Length 5.0—7.5 mm. *L. ogloblina* sp.n. 7

—. The length from posterior margin of 5th segment to apex the same as the length of 4th segment 7

7. Hind coxae as long as 1st—3rd segments combined. Punctulation on the face very fine. Inner orbits (fig. 3 B) very narrow and produced (much shorter than the diameter of ocellus). Valvula ventralis from anterior margin of the 5th segment.

Black, with face, occiput, pronotum, a band posterior or the whole mesopraescutum, propodeum, gaster laterally, pleurites and all coxae green-blue. Praescutum golden red and posterior part of the scutellum violet-blue. Legs fulvous. Length 7—10 mm. *L. cyaniceps* Rom.

—. Hind coxae as long as 1st—2nd+3rd segments combined. Puncturation on the face more coarse. Inner orbits (fig. 3 C) not very narrow (=the diameter of the ocellus) and not produced. Valvula ventralis from the middle of the 4th segment.

Black, with face, occiput, almost the whole pronotum, scutum, posterior part of the scutellum, callus and gaster laterally green-blue. Legs reddish brown with tint of green, middle and hind coxae reddish brown but sometimes all coxae blue-violet-green with only the apex yellow. Mid and hind legs with a yellow spot near the knees. Length 8—10 mm. *L. nebulipennis* Strand

8. Valvula ventralis from the middle of 4th segment. Puncturation on face coarse. Inner orbits (fig. 3 A) nearly of the same breadth as the diameter of the ocellus. Propodeum not punctured all over.

Black, with head, pronotum, scutum and half posterior part of scutellum, callus, and gaster laterally green-blue. Fore and middle coxae yellow-fulvous, hind coxae blue, apically yellow. Legs fulvous-yellow. Length 10—12 mm.

L. amazonica Rom.

♂♂.

1. Gena with the same breadth as malar space. 1st funicle segment longer than pedical. Pronotum longer than wide 2

—. Gena shorter (the breadth) than malar space. 1st funicle segment somewhat shorter than pedicel. Pronotum as long as wide 3

2. The 2nd funicle joint as long as the 3rd joint or somewhat longer, clava somewhat shorter than two last funicle joints. Length 8.5—11 mm.

L. ignicaudata Westw. (Fig. 5)

—. The 2nd funicle joint longer than the 3rd funicle joint (1 1/2 times), clava as long as the two last funicle joints. Length 9.5 mm. *L. maculipes* Cam.

3. Posterior part of the 1st segment of gaster with punctures 4

—. Posterior part of the 1st segment smooth. Length 6.0 mm. *L. ogloblina* sp.n.

4. Eyes with few hairs. Propodeum without a distinct median carina. Scutellum with equal punctures as scutum (mid lobe). The length from base of antennae to apex of scape as long as pedicel, anellus and 1st funicle joint. Length 5.5 mm.

L. nebulipennis Strand

—. Eyes hairy. Propodeum with a distinct median carina. Scutellum with large hexagonal puncture not equal to the puncture of scutum (mid lobe). The length from base of antenna to apex of scape as long as pedicel, anellus and 1st+2nd funicle joints. Length 5.0 mm. *L. amazonica* Rom.

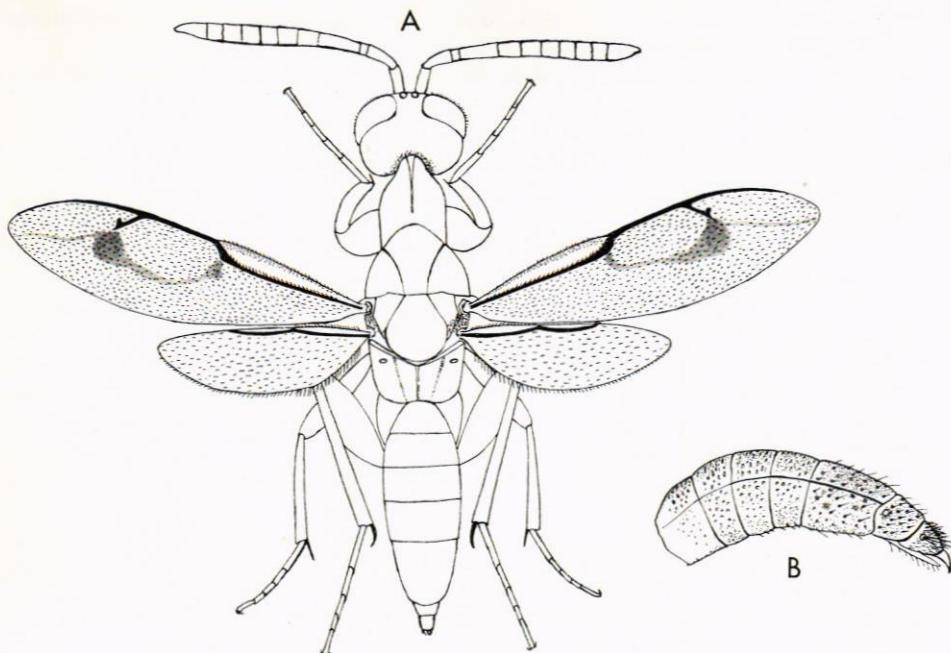


Fig. 5. A. *Lycisca ignicaudata* Westw. male, B. Gaster of *L. ignicaudata* Westw. in lateral view.

Thaumasurini Bouč.

Following genera belong to this tribe: *Thaumasura* Westw., *Mesamotura* Girlt., *Westwoodiana* Girlt., *Aligherinia* Girlt., *Marxiana* Girlt., *Austrogerrhus* Girlt., *Thaumasurelloides* Girlt., *Parepistenia* Dodd., *Cameronella* Dalla Torre, *Neoepistenia* Heqv. and *Aligheria* Girlt

Thaumasura Westw. 1868

Westwood, Trans. Ent. Soc. London., p. 36, 1868

Syn: *Aressida* Cameron, Proc. Linn. Soc. N.S. Wales., 36, pp. 350—351, 1911

Belonea Westwood, Thesaur. Ent. Oxon., p. 146, 1874

Agamerionella Girault, Mem. Queensl. Mus., IV, pp. 219—220, 1915

Type: *T. terebrator* Westw.

T. annulicornis (Cameron), Proc. Linn. Soc. N.S. Wales., 37, p. 207, N.S. Wales 1912

Aressida annulicornis Cam.

T. arenae Girault, unknown to me

T. auritegula Girault, Rec. S. Austr. Mus., III, p. 315, 1927 Queensland

T. australica (Westwood), Thesaur. Ent. Oxon., p. 147, 1874 Victoria
Belonea australica Westw.

T. bella Girault, Rec. S. Austr. Mus., III, p. 315, 1927 S. Australia

T. brevicaudata (Westwood), Thesaur. Ent. Oxon., p. 147, 1874 Mysol
Belonea brevicaudata Westw.

T. brevistylus (Girault), Mem. Queensl. Mus., IV, p. 220, 1915 Victoria
Agamerionella brevistylus Girlt.

T. brisbanensis (Girault), Mem. Queensl. Mus., IV, p. 222, Australia (Brisbane) 1915
Agamerionella brisbanensis Girlt.

T. carinicollis (Cameron), Proc. Linn. Soc. N.S. Wales., 36, Solomon Isl. pp. 351—352, 1911
Aressida carinicollis Cam.

T. curculionis (Girault), Mem. Queensl. Mus., IV, p. 221, 1915 Port Darwin
Agamerionella curculionis Girlt.

T. dentatitibia Girault, Rec. S. Austr. Mus., III, pp. 315—316, 1927 Queensland

T. diana Girault, Some New Hexapods stolen from Authority., p. 2, Victoria Brisbane 1928

T. erythropoda (Cameron), Mem. Philos. Soc. Manchester., 26, p. 122, Australia 1888
Belonea erythropoda Cam.

T. femoralis (Westwood), Thesaur. Ent. Oxon., p. 146, New Guinea Mysol, Aru 1874
Belonea femoralis Westw.

T. imperialis (Froggatt), Forest Insects., p. 55, 1927 Australia
Aressida imperialis Frogg.

T. locustiformis (Girault), Mem. Queensl. Mus., IV, pp. 219—220, West Australia 1915
Agamerionella locustiformis Girlt.

T. marmoratipennis Girault, Rec. S. Austr. Mus., III, p. 314, 1927 Queensland

T. nonstylata Girault, Insec. Insc. Menstr., X, p. 49, 1922 "

T. pulchripes Girault, Rec. S. Austr. Mus., III, pp. 314—315, 1927 "

T. pavo (Girault), Mem. Queensl. Mus., IV, p. 221, 1915 "
Agamerionella pavo Girlt.

T. respondens Gourlay, Trans. Proc. N. Z. Inst. p. 373, 1927 New Zealand

T. rubrofemoralis Ashmead, Proc. Linn. Soc. N.S. Wales., XXV, p. 341, N.S. Wales 1900

T. sanguinipes (Girault), Mem. Queensl. Mus., IV, pp. 220—221, 1915 Victoria
Agamerionella sanguinipes Girlt.

T. westwoodi Girault, Insec. Insc. Menstr., 5, 154—155, 1917 Australia
 In a private reprint Girault ("Some new Hexapods stolen from Authority Brisbane, p. 2, 1928") described a new genus *Proshizonotus* with a single species *Proshizonotus moseri*. He says "From *Thaumasura*: Small, spiracle, round, abdomen conic-ovate; hind tibial spurs small. Postmarginal distinctly shorter than marginal ovipositor a bit extended". Possibly synonymous to *Thaumasura*.

Neoepistenia Heqv. 1958
 Heqvist, Ent. Tidskr. 79, pp. 194—196, 1958
 Type: *N. flavoscapus* Heqv.

N. flavoscapus Heqv., ibid., p. 196, 1958 Brazil
Mesamotura Girlt. 1925
 Girault, Indications (in new insects) of ruling power and law in nature. p. 3, Brisbane, 10.3.1925
 Type: *M. aristophani* Girlt.

M. aeschyli Girault, Rec. S. Austr. Mus., III, p. 312, 1927 Queensland
Entomol. Ts. Arg. 82. H. 1—2, 1961

M. aristophani Girault, Indications (in new insects) of ruling power and law in nature. p. 3, Brisbane, 10.3.1925 Australia (Gympie)
M. corticis Girault, Insec. Insc. Menstr., 14, pp. 133—134, 1926 Australia (Gympie)
M. keatsi Girault, Rec. S. Austr. Mus., III, p. 312, 1927 Queensland

Westwoodiana Girlt. 1922
 Girault, Insec. Insc. Menstr., X, p. 151, 1922
 Type: *W. testaceifemora* Girlt.

W. purpureipes Girault, Rec. S. Austr. Mus., III, p. 316, 1927 Queensland
W. testaceifemora Girault, Insec. Insc. Menstr., X, p. 151, 1922 ,

Aligherinia Girlt. 1922
 Girault, Insec. Insc. Mestr., X, pp. 148—149, 1922
 Type: *A. sidneyi* Girlt.

A. angustifrons Girault, Rec. S. Austr. Mus., III, p. 313, 1927 Queensland (Kuranda)
A. sidneyi Girault, Insec. Insc. Menstr., X, p. 149, 1922 Australia (Sydney)

Aligheria Girlt. 1928
 Girault, Some new Hexapods stolen from Authority., Privat, p. 2, Brisbane, 23.V., 1928.
 Type: *A. cyanea* Girlt.

A. cyanea Girault, ibid., p. 2, 1928 Australia
 In British Museum (Nat. Hist.) a specimen of an undescribed species belonging to this genus

Marxiana Girlt. 1932
 Girault, New pests from Australia. X., Privat. Brisbane 1932
 Type: *M. grandiosa* Girlt.

M. grandiosa Girault, ibid. Australia

Thaumasurelloides Girlt. 1927
 Girault, Philipp. Journ. Sci., 32, p. 554, 1927
 Type: *T. silvae* Girlt.

T. silvae Girault, ibid., pp. 554—555 Philippines

Austrogerrhus Bouč. 1958
 Bouček, Acta Ent. Mus. Nat. Pragae., XXXII, pp. 371—373, 1958
 Type: *A. gloriosus* Bouč.

A. gloriosus Bouček, ibid., pp. 373—374, 1958 Queensland

Paraepistenia Dodd 1915
 Dodd, in Girault, Mem. Queensl. Mus., IV, p. 218, 1915
 Type: *P. varicornis* Dodd

P. varicornis Dodd, ibid., pp. 218—219, 1915 Queensland (Brisbane)
 Entomol. Ts. Årg. 82. H. 1—2, 1961

<i>L. australiensis</i> Dodd, Mem. Queensl. Mus., IX, pp. 63—68, 1927	Queensland
<i>L. howardi</i> (Ashmead), Proc. Ent. Soc. Wash., 3, p. 233, 1895	Brazil
<i>Pelicinella howardi</i> Ashm.	
<i>L. peleciniformis</i> Smith, Trans. Ent. Soc. London., 1, pp. 43—44, 1868	Brazil
<i>L. phantasma</i> (Westwood), Trans. Ent. Soc. London., 7, p. 35, 1868	Brazil
<i>Pelicinella phantasma</i> Westw.	
<i>L. stephanoides</i> Roman, Ark. Zool., 12, pp. 22—24, 1920	Brazil
<i>L. westwoodi</i> (Ashmead), Proc. Ent. Soc. Wash., 3, p. 233, 1895	Brazil
<i>Pelecinella westwoodi</i> Ashm.	

The following genera have been placed incorrectly in *Cleonyminae* or belongs to *Cleonyminae* but are not possible to place in tribes without seeing the types.

Aphotismus Girlt. 1913=belongs probable in *Chalcedectinae*

Amerostenus Girlt. 1913=belongs to *Eupelmidae*

Amicromelus Girlt. 1913=*Miscogasterinae*

Austrophotismus Girlt. 1938=*Trigonoderus*-group

Brachycaudonia Ashm. 1904=*Miscogasterinae*

Elemba Cam. 1908=*Balcha* Walk. 1862=*Eusandalum* Ratzb. 1852

Entedonastichus Girlt. 1920=*Entedoninae* see Girlt. 1922

Epicaudonia Girlt. 1914=not *Cleonyminae*

Episystole Girlt. 1927=possibly *Chalcedectinae*

Eupelmophotismus Girault, Insec. Insc. Menstr., 8, 144, 1920=*Cleonyminae*

 Type: *E. eupelmoideus* Girlt.

E. eupelmoideus Girault, ibid., Queensland

 Not possible to place in a tribe without seeing the type.

Eurytomomma Girlt. 1920=*Eurytomidae* see Girlt. 1922

Moorella Cam. 1913=*Eupelmidae* near *Metapelma* Westw.

Neocaudonia Dodd 1915=*Amicromelus* Girlt. 1913

Neostomatoceras Girlt. 1920=*Chalcididae* see Girlt. 1922

Paratomicobia Girlt. 1915=not *Cleonyminae*

Pycnetron Gahan 1925=not *Cleonyminae*

Schizonatella Girault, Rec. S. Austr. Mus., III, p. 312, 1927

 Type: *S. eupelmoidea* Girlt.

S. eupelmoidea Girault, ibid., pp. 312—313 Queensland (Kuranda)

 This seems to be a true *Cleonyminae* but not possible to place without seeing the type.

Tomicobiella Girlt. 1915=not *Cleonyminae*

Tomicobomorpha Girlt. 1915=not *Cleonyminae*

Tomicobomorphella Girlt. 1915=not *Cleonyminae*

Trigonoderopsis Girlt. 1915=not *Cleonyminae*

 Some of Girault's species described as belonging to *Platygerrhus* Thoms. seem according to the descriptions to belong to *Thaumasurini* (genus ?) and *Lyscinini* (Epistenia?). The types will solve this problem.

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HEQVIST, K.-J.: Über die Gattung *Heydenia* Först (Hym. Chalc.). — Opusc. Ent., 22, pp. 39—48, 1957.
 — Notes on Chalcidoidea. V. — Ent. Tidskr., 79, pp. 176—200, 1958.
 — Hymenoptera (Chalcidoidea) Cleonymidae. — South African Animal Life., VII, pp. 414—417, 1960.
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 KERRICH, G. J. & GRAHAM, M. W. R. DE V.: Systematic notes on British Swedish Cleonymidae, with description of a new genus (Hym. Chalcidoidea). — Trans. Soc. Brit. Ent., 12, pp. 265—311, 1957.
 MUESEBECK, C. F. W., KROMBEIN, K. V.
 TOWNES, H. K. and others: Hymenoptera of America north of Mexico. Synoptic Catalog. — U.S. Dept. Agric. Agriculture Monograph No. 2. Washington, D.C. 1951.
 KROMBEIN, K. V. and others: Hymenoptera of America north of Mexico. First supplement, Washington, D.C. 1958.
 SCHMIEDEKNECHT, O.: Hymenoptera Fam. Chalcididae. — Genera Insect (Wytsman), 97, pp. 1—550, Bruxelles 1909.

Genera incertae sedis.

Risbecisca Heqv. 1960

Heqvist, South African Animal Life., VII, p. 418 1960 (No description of the genus)

Antennae 13-jointed (11173) inserted on a level with ventral edge of eyes. Pronotum long. Notaulices complete. Axillae meet each other in front of scutellum. Propodeum long with a median carina. Gaster petiolated. Ovipositor long, pru-troding. Fore wing with two tufts of black setae; one at the base of parastigma and one at the base of marginal vein. Marginal vein nearly 2 times as long as postmarginal vein. Radial vein shorter than postmarginal vein. Legs slender.

This is an extract from Risbeck's (Bull. d'I.F.A.N., XVII, sér. A, pp. 241—247, 1957) description of the species *Lycisca burgeoni* Rissb.

Type: *Lycisca burgeoni* Rissb.

R. burgeoni (Risbec), Bull. d'I.F.A.N., XVII, sér. A., pp. 241—247, 1955 Belgian Congo
Lycisca burgeoni Rissb.

This aberrant genus belongs to *Heydenini*. *Risbecisca* Heqv. differ from *Heydenia* Först. in having a long ovipositor, slender legs, distinct notaulices and axillae meeting each other in front of scutellum.